

EPITONIUM TEXTIMATTUM, A NEW GASTROPOD
FROM THE WEST COAST OF MEXICO

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ABSTRACT

Epitonium (*Asperiscala*) *textimattum* DuShane, n. sp. (Gastropoda) is described from sublittoral water off the west Mexican states of Nayarit, Jalisco, and Colima. It resembles *E. walkerianum* Hertlein and Strong.

Family EPITONIIDAE

Genus *Epitonium* Röding, 1798 [*Scala*
of authors; *Scalaria* Lamarck, 1801]

Subgenus *Asperiscala* deBoury, 1909

Species referable to the subgenus *Asperiscala*, with its type species of *Scalaria bellastrata* Carpenter, 1864, are relatively common constituents of the Panamic-Galapagan fauna, there being 21 recognized species. The new species is known only from the sublittoral zone, 7 to 18 meters, in a mud substrate, dredged from 4 stations off the states of Nayarit, Jalisco, and Colima, Mexico.

Epitonium (*Asperiscala*) *textimattum* n. sp.

(Figs. 1-8).

Description: Shell medium to large in size, elongate-conic, white, sturdy; nuclear whorls 3 to 4, horn-color, rounded, glassy, with a brown sutural line, first two whorls small, subsequent ones much larger and more bulbous with no noticeable sculpture; fifth whorl down with minute indentations and small axial ribs; post-nuclear whorls 5 to 10, rounded, slightly sloping; suture distinct; axial sculpture of 10 to 12 low, rounded, chinalike ribs, inverted V-shaped on early whorls, flat-topped and of varying widths on later whorls, with fine axial grooving and widely-spaced spiral sculpture on the sides (magnification of 20X), without angulation, curving into the sutures, not continuous from whorl to whorl, with an occasional one twice the width of the others; channels between ribs twice the width of the ribs; axial and spiral sculpture striolate (magnification of 40X) between ribs, carrying over the ribs as fine indentations; aper-

ture ovate, outer lip but slightly thickened by the last rib, with faint traces of spiral impressions; peritreme complete, narrower on the columellar portion; umbilicus lacking; operculum light horn color, paucispiral. Length, 12 mm; width, 4 mm (holotype).

Discussion: This epitoniid from the Panamic-Galapagan fauna has an elongate-conic shape combined with a matte texture and sturdy ribs with faint, irregular spiral impressions. Sizes vary from 9.5 to 17 mm in length, with from 10 to 12 costae. (See Figs. 1, 2, 3)

At first it was thought that this species might be the enigmatic *Epitonium* (*Asperiscala*) *regulare* (Carpenter, 1856), type locality, Panama. The original description of *E. regulare* mentions 3 syntype specimens; Keen (1965) photographed 4 specimens labeled with this name, but the label [BM(NH) Reg. No. 1950. 4. 18. 13/16] is not in



FIGS. 1-3—*Epitonium* (*Asperiscala*) *textimattum* DuShane, n. sp. 1—Holotype (LACM, Malacology Type Collection, no. 1846). Length, 12 mm; width, 4 mm. 2 and 3—Paratypes (DuShane Collection). Smaller specimen: length, 11 mm; width, 5 mm. Larger specimen: length, 15.5 mm; width, 5 mm.



FIG. 4—*Epitonium regulare* (Carpenter, 1856): syntype specimens, IBM(NH) Reg. No. 1950. 4. 18. 13/16]. The smallest specimen in the photograph, which may be the broken top of the first specimen to the left, has been lost (teste Dr. John Taylor). Specimen to the far right was erroneously considered by Palmer to be the holotype. $\times 3.14$

Carpenter's handwriting (teste Keen). It is doubtful if any of the specimens shown (Fig. 4) are *E. regulare* of Carpenter, therefore, I do not choose to select a lectotype from among them. Compared to *E. textimattum* the left hand specimen has prominent spiral sculpture between the whorls and very thin costae. The smallest specimen from the left (lost, *fide* Dr. John Taylor, BM(NH)), might well be the upper broken portion of the lefthand specimen. The largest specimen has more convex whorls, a less contracted suture and twice the number of costae (20-22), with narrow interspaces between costae. The right hand specimen has many strong costae, crowded on the whorls, with fine spiral threads between.

The brief description given by Carpenter (1856: 164) makes identification of his nominal species difficult, if not impossible; therefore, their type status is questionable. Palmer (1963: 332) unwisely cited the last specimen mounted on the right as the holotype, which being figured by her, is tantamount to a type selection. This specimen does not fit Carpenter's original description. Because of the uncertainty of the identity of Carpenter's taxon it must stand as a *species inquirenda*.

Pilsbry and Lowe (1932: 120) reported having taken *Epitonium regulare* at Acapulco, Mexico, but examination of the two specimens in the Lowe collection (SDMNH 26442), at San Diego, California, proves them to be *Epitonium (Asperiscala) eutaenium* Dall, 1917. Except for this one reference there seems to be no other cita-

tions to *E. regulare* other than to the syntypic specimens at the BM(NH).

Epitonium (Asperiscala) textimattum is closer to *Epitonium (Asperiscala) walkerianum* Hertlien and Strong, 1951 (3.7 to 8 mm in length), than to any other species in the Panamic-Galapagan fauna. It differs from the latter by having much finer spiral threads, fewer and discontinuous ribs, with an occasional heavier rib, and by having a larger shell (9.5 to 17 mm in length). The range for *E. walkerianum* is from San Felipe, Gulf of California, along the west coast of Mexico as far south as Nicaragua, taken from the intertidal zone down to 23 meters, whereas *E. textimattum* is known only from off the west Mexican states of Nayarit, Jalisco, and Colima.

The soft parts, when live, show through the shell as coral-pink in color. The color fades to a peach-tan within a few weeks. Sixty specimens of this species were dredged just beyond the wave line at Playa Los Angeles, Jalisco, Mexico, mud substrate, at a depth of 7 to 18 meters in association with the sand dollars, *Encope fragilis* Clark, 1948 and *Encope perspective* Agassiz, 1841, August 1975, by Carol and Paul Skoglund. Dredging repeated at the same locality in December, 1975 revealed only two specimens of the new species and only a few specimens of *Persicula* sp. and *Kurtziella* sp. that were so numerous in



FIG. 5—Map taken from the U. S. Hydrographic Survey showing the coastline along which *Epitonium (Asperiscala) textimattum* DuShane, n. sp. occurs. The solid triangle indicates the type locality.

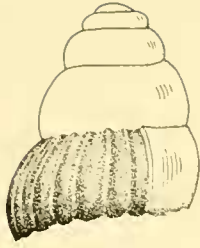
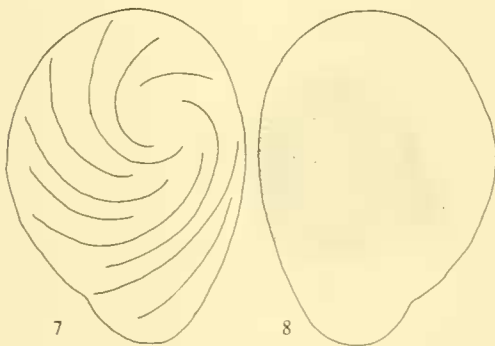


FIG. 6—*Epitonium (Asperiscala) textimattum* DuShane *n. sp.* Nuclear whorls showing sculpture on the fifth whorl down of minute indentations and small axial ribs (white portions).

August. In addition, few sand dollars were present in the December dredgings.

Type locality—Playa Los Angeles, Tenacatita Bay, Jalisco, Mexico (Lat. 19° 18' N; Long. 104° 50' W), at depths of 7 to 18 meters. (See Map)

Type material—holotype, Los Angeles County Museum, Malacology Type Collection, No. 846. Paratypes (1): To each of the following institutions, American Museum of Natural History, British Museum (Natural History), Delaware Museum of Natural History, Los Angeles County Museum of Natural History, National Museum of Natural History (Smithsonian Institution), Academy of Sciences of Philadelphia, Santa Barbara Natural History Museum, San Diego Natural History Museum; (2) DuShane Collection; remainder in the Bennet and Skoglund Collections. Additional paratypes.—Lo de Marcos, Nayarit; collected by the Bennets and Skoglunds, September, 1974, dredged from 7 to 18 m, 1 specimen; Cuastecomate, Jalisco; collected by the Skoglunds, August, 1975, dredged from 11 to 27



FIGS. 7 and 8—*Epitonium (Asperiscala) textimattum* DuShane, *n. sp.* 7—Operculum showing growth lines. Actual size 2 mm. 8—Attachment side of operculum showing muscle attachment scar.

m, 2 specimens; Santiago Bay, Colima; collected by the Skoglunds, August, 1975, dredged from 11 to 18 m, 1 specimen.

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